WA 3019 18A 3/11/02

To:

Kim Ogle

Cc:

Pat Cirone, OEA Julie Wroble, OEA

From: Date:

March 11, 2002

Re:

Site Investigation Work Plan, JH Baxter & Co., Arlington, Washington

Kim:

I reviewed the above-referenced report and have made detailed comments as outlined below. In general, the work plan is well-organized. However, in some cases, additional detail would be useful to understand how the work plan will actually be implemented. This is especially true for the description of the air assessment. Although the text states that data collected for workers will be used to assess residential exposures, it does not describe how this data will be extrapolated from a worker scenario on site to a residential scenario off-site. Based on the concentrations provided, there is an indication that nearby residents could be at risk, but sufficient data have not been presented to absolutely draw that conclusion.

I also evaluated how existing concentrations detected in other media sampled compare to Region 9 PRGs (which Region 10 uses as screening levels). Below I note several instances where these screening levels are exceeded by a significant margin.

I look forward to discussing these comments with you on Wednesday afternoon. You can try calling me at home on Tuesday if you wish to discuss these comments sooner (home (b) (6)

The following table provides the PRGs for several compounds of interest:

Analyte	PRG Industrial Soil (mg/kg, unless noted)	PRG Tap Water (ug/L, unless noted	PRG Air (ug/m3, unless noted)
Pentachlorophenol	11	0.56	0.056
Benzo(a)pyrene	0.29	0.0092	
2,3,7,8-TCDD	0.027 ug/kg	0.45 pg/L	

TBP = To be provided.

Section 5.1.1: Based on PCP concentrations detected in surface soil, risks to workers may be as high as 1 x 10-4.

Section 5.1.3: PAHs are about an order of magnitude greater than the respective industrial PRGs. (Note that at Oeser, because of additivity, risks often exceeded 1 x 10-4 for PAHs.)

Section 5.1.4: Based on dioxin concentrations in surface soil, risks to workers may be as high as 1 x 10-4.

Section 5.2.3: PCP concentration maximums in subsurface soil are similar to surface soil concentrations.

Section 5.2.4: Dioxin concentrations in subsurface soils exceed a worker risk of 3 x 10-3 assuming direct, regular contact. This section notes a correlation between dioxin maximum and NAPL – indicating it's associated with products used on site.

Section 5.3.4: Stormwater concentrations of dioxins exceed the tap water PRG for 2,3,7,8-TCDD by 4 orders of magnitude. The question then becomes whether this represents a potentially complete exposure pathway for any human receptors.

Section 5.6: If the worker's air concentration was assumed to be the same concentration that a nearby



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resident would be exposed to for 30 years, 24-hours/day, then the risks would be about 4 x 10-3. However, this is a big leap, that's why additional clarification on how worker air data will be used to assess residential air risks should be provided in this document.

Section 8: Dioxin sampling is limited to small percentage of samples if any at areas. Since it seems to be associated with products used on-site, should this be expanded? Depends on your goals.

Section 8.5: How many background composite samples will be collected? Do we want to ensure there's enough for statistical comparison to on-site data?